

ART. 25.—*New Species of New Zealand Delphacidae (Homoptera).*

By F. MUIR, Hawaiian Sugar-planters' Experiment Station, Honolulu, T.H.

Communicated by J. G. Myers.

[Read before the Wellington Philosophical Society, 2nd August, 1921; received by Editor, 31st December, 1921; issued separately, 30th April, 1923.]

Nilaparvata myersi n. sp. (Figs. 1, 1A.)

♂. Macropterous; length, 2.6 mm.; tegmen, 3.3 mm. Head nearly as wide as thorax; length of vertex subequal to width, apex slightly narrower than base, projecting beyond eyes, median carina projecting prominently, base considerably behind middle of eyes; length of face 2.3 times width, sides subparallel, base slightly narrower than apex, median carina simple. Antennae reaching slightly beyond base of clypeus, second segment 1.5 times length of first. Lateral pronotal carinae diverging, curved, not reaching hind-margin. Hind basitarsus as long as or slightly longer than the other two together; spur large, as long as basitarsus, broad, laminate, concave on inner surface, numerous (fifteen to twenty) distinct teeth on hind-margin.

Opening of pygofer wider than long; lateral margins not continuous with ventral, rounded, entire, ventral margin ending in a slight elevation beside foramen of diaphragm; anal emargination wide, shallow, anal angle rounded, slightly produced. Diaphragm long, dorsal margin steeply sloping at sides, middle portion sinuate, asymmetrical and slightly projecting in middle. Anal segment median size, short, with two strong, laterally-flattened and curved spines with their bases not touching. Genital styles large, flat, broad, basal angle large, beyond which inner margin concave, outer margin sinuous, apex truncate, straight, broad, inner angle projecting, rounded at apex and turned at an angle to main body. Aedeagus comparatively small, basal half subcylindrical, slightly flattened laterally; apically pointed, with a row of about five teeth along right side and three minute ones more dorsad, on ventral aspect produced into a thick, curved spine. Orifice not detected; it may be on curved spine or on main body.

Black or dark brown, legs lighter, base of abdomen yellowish. Tegmina hyaline, dark mark on hind-margin from middle of clavus to apex of claval vein; fuscous over greater part of clavus, less so over cubital area and around apical margin. Veins slightly darker than membrane, granules minute, sparse, black. Wings hyaline, veins brown.

Described from one male from Mount Alpha, Tararua Range, Wellington, North Island, 4,500 ft. elevation. (*J. G. Myers*, 15th February, 1921, No. 158). Type in Dominion Museum, Wellington.

This is quite a distinct species, the aedeagus being unlike any I am acquainted with.

Delphacodes tasmani n. sp. (Figs. 2, 2A.)

♂. Macropterous; length, 2 mm.; tegmen, 2.7 mm. Length of vertex equal to width at base, vertex projecting beyond eyes, median carina projecting, base slightly behind middle of eyes, slightly wider than apex. Length of face 2.2 times width, sides subparallel, median carina simple. Antennae reaching slightly beyond base of clypeus, second segment 1.7 times the

length of first. Pronotal carinae curved, diverging, not reaching hind-margin. Hind basitarsus slightly longer than other two together; spur as long as basitarsus, broad, laminate, about twenty small black teeth on hind-margin.

Opening of pygofer wider than long, lateral margins entire, round, slight emargination on ventral margin, anal emargination shallow, broad, anal angles obscure, not produced. Diaphragm fairly long, dorsal margin widely U-shaped with middle straight and very slightly projecting, no distinct armature. Anal segment large, spine short, broad, laterally flattened, curved, bases wide apart and diverging to apex; a second pair of spines at base of anal segment on ventral side, laterally flattened, apices acute. Genital styles flat, fairly narrow, inner margin slightly concave on apical third, convex basally, outer margin slightly sinuous, apex truncate, outer angle fairly acute, inner angle rounded. Aedeagus long, subtubular, slightly flattened laterally, in lateral view slightly largest on basal half, orifice at apex on left side, a row of seven or eight teeth from dorsal aspect of apex along each side to a ventral point about middle; one or two small teeth apical to this on ventral aspect.

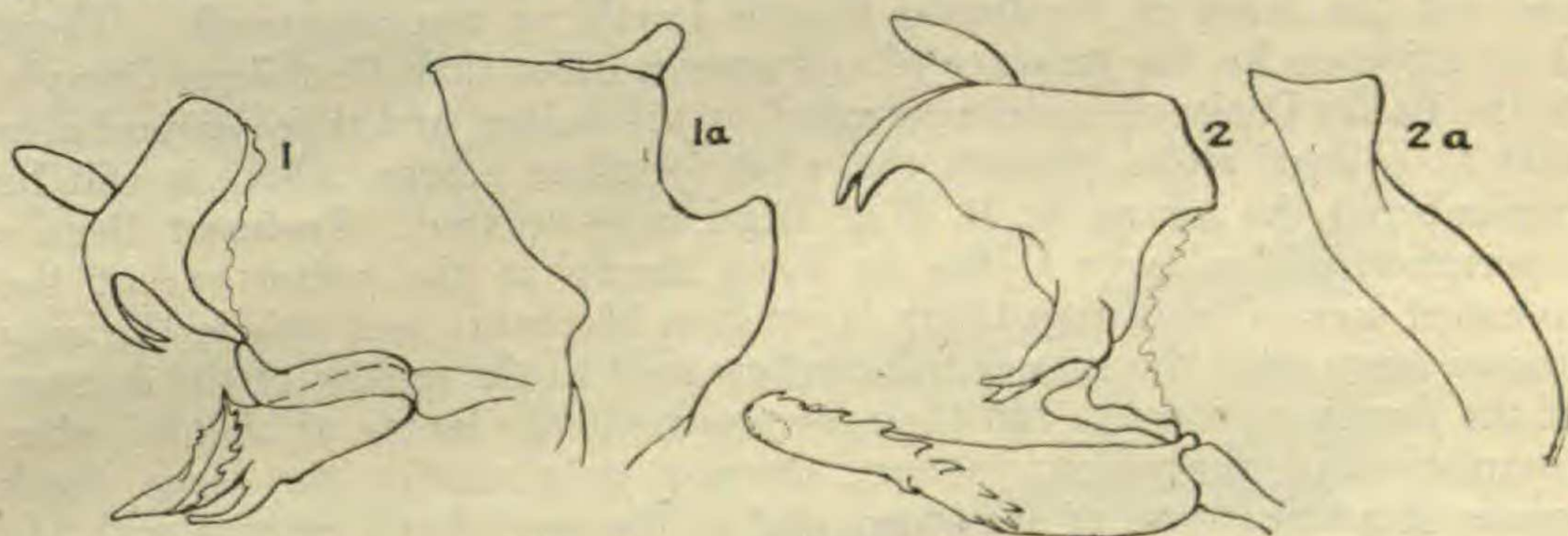


FIG. 1.—Anal segment and aedeagus of *Nilaparvata myersi*.
 FIG. 1A.—Left genital style of same.
 FIG. 2.—Anal segment and aedeagus of *Delphacodes tasmani*.
 FIG. 2A.—Left genital style of same.

Light brown; darker between carinae of face, clypeus and genae, and on pleura of thorax; legs lighter brown, abdomen dark. Median carinae of thorax and the base of commissure light. Tegmina hyaline, a small dark mark on hind-margin at apex of claval vein, veins slightly darker than membrane, apical veins darker, granules minute, sparse, dark, bearing small black macrotrichia.

♀. Macropterous; length, 2.5 mm.; tegmen, 3 mm. Slightly darker than male.

Described from one male (holotype) and one female (allotype) from Waikanae (*J. G. Myers*, 4th February, 1921, No. 125). There is a second female (paratype) from Bull Mound, Tararua Range, 3,300 ft. elevation (*J. G. Myers*, 13th February, 1921). Another female from Waikanae may be immature; it is very much lighter in colour. All these deposited in the Dominion Museum, Wellington.

Beside the above two species, one other species of *Delphacodes* is known from New Zealand (*D. meridionalis* Muir*), which is closely related to *D. tasmani*. If they should prove to be the same species it will be of interest, as it will show a distinct difference of genitalia in the brachypterous and macropterous forms.

* *Proc. Hav. Ent. Soc.*, iii, 4 (1917), p. 334, pl. v, figs. 24, 24A.